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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/896,886  | 06/29/2001  | Collin P. Galloway   | 00066CON            | 1023             |
| 7590  | 04/21/2006  |                      | EXAMINER            |                  |
| Michelle B. Lando, Esq.<br>CABOT CORPORATION<br>Law Department<br>157 Concord Road<br>Billerica, MA 01821 |             |                      | HAMILTON, CYNTHIA   |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1752                |                  |
| DATE MAILED: 04/21/2006   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

|                  |                 |  |
|------------------|-----------------|--|
| Application No.  | Applicant(s)    |  |
| 09/896,886       | GALLOWAY ET AL. |  |
| Examiner         | Art Unit        |  |
| Cynthia Hamilton | 1752            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on 01 March 2006.  
2a) This action is FINAL. 2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 56-73,75-86 and 111-118 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) 56-73,83-86 and 111-113 is/are allowed.  
6) Claim(s) 75-82, 115-118 is/are rejected.  
7) Claim(s) \_\_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 75-82 and 115-118 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 75 recites in lines 4-5 that the polymeric coating is “not substantially extractable by an organic solvent”. Such a phrase renders the claim indefinite. In this case there is absolutely no guidance as to what is meant by the phrase, such as which organic solvents or the conditions under which the polymer is not extractable. The only place this limitation is mentioned is in paragraph [0060], but with no explanation as to its meaning. Without more guidance, one of ordinary skill in the art would not know when they would be infringing the claim and when they would not. The examiner notes that if applicants can prove that “substantially extractable by an organic solvent” has some well recognized meaning in the art or is defined in the specification in such a manner as to make such limits clear to the worker of ordinary skill in the art that this rejection would be overcome.

2. Claims 75-76, 79-82, 115 and 118 are rejected under 35 U.S.C. 102(b) as being anticipated by Senga et al (4,873,166). It appears that Senga et al anticipate the plate of at least instant claims 75-76, 79-82, 115 and 118. In col. 14, lines 5-9, Senga et al disclose a printing plate made by taking an aluminum plated (corresponding to the recited substrate) that has been subjected to a hydrophilizing treatment, coating the plate with an e-type copper phthalocyanine (corresponding with the recited pigment) dispersed in an acrylic resin (corresponding with the polymeric coating comprising an acrylic polymer), and drying the plate. Because the particles are dispersed in the resin when the particles are coated onto the plate, then dried, the particles would inherently be at least partially coated with the acrylic resin. Further more the dried

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coating on the plate would inherently be able to absorb at least some radiation, and therefore would correspond to the recited “radiation absorptive layer”. The last issue that needs to be considered is the recitation that the polymeric coating is “not substantially extractable by an organic solvent”. Again this would appear to be inherent in the dried acrylic resin of Senga et al for at least a couple of reasons. Applicants give no guidance in the disclosure or claims as to what is meant by “not substantially extractable in an organic solvent.” Does this mean all solvents or would this limitation be met as long as the polymer is not solvent in one organic solvent? What conditions did applicant intend for an extraction test? In other words if one were to contact the polymer with an alcohol for one second and most of the polymer remains, is it “substantially insoluble”? Without any guidance by applicant to determine what is meant by the phrase, it would be appropriate to take a very broad reading of the phrase. Consequently, my position is that there is at least one organic solvent that the acrylic resin of Senga et al is not soluble in, and, therefore, this would lead to the conclusion that the limitation is inherent in the plate of Senga et al. Furthermore, my position is also that there are certain extraction conditions that could be selected such that given an organic solvent; the extraction would no “substantially” extract the dried acrylic resin of Senga et al. Again, this would lead to the conclusion that the plate of Senga et al inherently meets that limitation of the claims. The acrylic resin is the “polymer” of claim 76 as well.

3. Claims 75-76, 79-80, 115 and 118 are rejected under 35 U.S.C. 102(a or e) as being anticipated by Kato et al (6,080,449). It appears that Kato et al anticipate the plate of at least instant claims 75-76, 79-80, 115 and 118. In col. 23-26 as well as Examples with special reference to Example 16, Kato et al disclose a printing plate which is formed from coating the

plate with base having an acrylic/styrenic polymer coating over a zinc oxide (a pigment).

Because the particles are dispersed in the resin when the particles are coated onto the plate, then dried, the particles would inherently be at least partially coated with the polymer. Further more the dried coating on the plate would inherently be able to absorb at least some radiation, and therefore would correspond to the recited “radiation absorptive layer”. The last issue that needs to be considered is the recitation that the polymeric coating is “not substantially extractable by an organic solvent”. Again this would appear to be inherent in the polymers of Kato et al for at least a couple of reasons. Applicants give no guidance in the disclosure or claims as to what is meant by “not substantially extractable in an organic solvent.” Does this mean all solvents or would this limitation be met as long as the polymer is not solvent in one organic solvent? What conditions did applicant intend for an extraction test? In other words if one were to contact the polymer with an alcohol for one second and most of the polymer remains, is it “substantially insoluble”? Without any guidance by applicant to determine what is meant by the phrase, it would be appropriate to take a very broad reading of the phrase. Consequently, my position is that there is at least one organic solvent that the polymer of Kato et al is not soluble in, and, therefore, this would lead to the conclusion that the limitation is inherent in the plate of Kato et al. Furthermore, my position is also that there are certain extraction conditions that could be selected such that given an organic solvent; the extraction would no “substantially” extract the polymer of Kato et al. Again, this would lead to the conclusion that the plate of Kato et al inherently meets that limitation of the claims.

4. Claims 75-76, 79-82, and 115-118 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimizu et al (6,218,073 B1). It appears that Shimizu et al anticipate the plate of

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at least instant claims 75-76, 79-82, and 115-118. The plates of Example 1 anticipate the instant plate wherein the acrylate resin grafted carbon black is a carbon black pigment coated with acrylic resin which is also attached by graft in a layer along with the acrylic polymer polymer particles, i.e. the added polymer.

5. Applicant's arguments filed March 1, 2006 have been fully considered but they are not persuasive. With respect to claims 75-82 and 115-118 are rejected under 35 U.S.C. 112, second paragraph, Applicants have alleged that "not substantially extractable by an organic solvent" is clearly means "the polymeric coating cannot be removed from the modified pigment product by any organic solvent". There is no use of "any" in the claim language in claim 75. Claim 75 is as follows:

75. (Previously presented) A printing plate comprising: a) a substrate and b) a radiation-absorptive layer, wherein the radiation-absorptive layer comprises at least one modified pigment product comprising a pigment that is at least partially coated with one or more polymeric coatings, wherein the polymeric coating is not substantially extractable by an organic solvent, and wherein the polymeric coating comprises an acrylic or styrenic polymer.

Applicants in their arguments have separated the modified pigment product from the polymeric coating. The claim language requires that the modified pigment product be comprised of a pigment that is at least partially coated with one or more polymeric coatings. Thus, applicant's allegations directed to a separation of the polymeric coating from the modified pigment product of which it is a part do not make sense. This is indicative of the confusion of the language set forth in the claims in question. The rejection stands. Because of this confusion rejections over claims 75-76, 79-82, 115 and 118 under 35 U.S.C. 102(b) as being anticipated by Senga et al (4,873,166), claims 75-76, 79-80, 115 and 118 under 35 U.S.C. 102(a or e) as being anticipated

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by Kato et al (6,080,449), and claims 75-76, 79-82, and 115-118 under 35 U.S.C. 102(b) as being anticipated by Shimizu et al (6,218,073 B1) stand for the reasons given. The examiner believes she has given sufficient support to sustain the rejections made.

6. Rejections of claims 111 and 115 under 35 U.S.C. 112, second paragraph, are overcome by applicants' amendments.

7. Claims 56-73, 83-86 and 111-113 are allowed.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

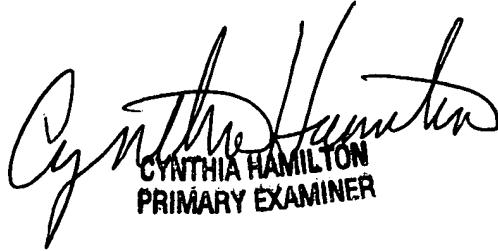
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-1331. The examiner can normally be reached on Monday through Friday 9:30 am to 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571) 272-0729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Handwritten signature of Cynthia Hamilton. Below the signature, the name is printed in a stylized font: CYNTHIA HAMILTON and PRIMARY EXAMINER.

Cynthia Hamilton  
Primary Examiner  
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April 18, 2006